## LOCAL FLOOD RISK

Management Strategy



2021 - 2027



The Flood and Water Management Act 2010 requires that, as a Lead Local Flood Authority, Nottinghamshire County Council must lead on managing local flood risks within its administrative boundary.

Our Local Flood Risk Management Strategy sets out our approach to achieving this and details our aims and actions to reduce the impact and likelihood of local flooding across the County.

#### Our role is further structured and supported through:

- County Council Members, Committees and departmental plans.
- Preliminary Flood Risk Assessment.
- Partner Risk Management Authorities.
- Parish Council & Community Groups.

# **OUR ROLE** IN MANAGING FLOOD RISK Across Nottinghamshire

Local flood risk means the flooding caused by surface water, small watercourses, groundwater and rainfall.

We assess flood risk using data from our Preliminary Flood Risk Assessment, mathematically modelled flood risk mapping and historical flood events. With over 85,000 properties at risk of flooding in Nottinghamshire, managing the risk is a significant challenge for us.

Since 2012 over 3000 homes and businesses across the County have suffered the physical and mental devastation caused by internal flooding.

In this document we share real success stories from around the County showing how our role makes a difference to those at risk of flooding.

We want you to be informed about flood risk, what can be done, how it can be done and who is responsible.

Every year we are involved in helping more of our residents and businesses become flood resilient with our ultimate goal to reduce the risk of flooding to all our communities.

If you need further information or support, please talk to us using the information below.



www.nottinghamshire.gov.uk/planning-and-environment/flooding-help-and-advice

0300 500 8080 - flood.team@nottscc.gov.uk



The impacts of flooding do not disappear with the flood water, often the physical impacts are still being felt several years after the event and the psychological impacts much longer.

Whilst our strategy and duties provide the structure within which we operate our people provide the ability and purpose.

Our Flood Risk Management Team contains the experience and abilities to deliver and make a difference, our residents provide our purpose and focus.

Flooding can be a complicated problem, often involving many different people and organisations and we pride ourselves in our ability to navigate our way through those complexities and secure solutions.

"It is now over 8 months since the events of that morning and i finally have the energy and motivation to enlighten you about how that situation devastated my life.

I continue to live with memory, wading through filthy water in the darkness of the morning, to discover the ground floor of my house flooded throughout, not one of my rooms spared by the great tide that forced its way in as it surged along the road and through the houses, cars and gardens.

My hard-earned furniture, belongings, and precious things some bought to remind me of my travels and experiences, some cared for gifts from family and friends - all lost and irreparable.

12 major flood events in 12 years.

# **OUR APPROACH** to managing flood risk

An Action Plan provides detailed objectives, measures and actions and provides a focus under which we operate.

Our action plan is under constant review with formal changes made every 5 years. A copy of it can be found by following this link: <a href="https://www.nottinghamshire.gov.uk/media/3655473/">https://www.nottinghamshire.gov.uk/media/3655473/</a> appendixbncclocalfloodriskmanagementstrategyactionplan.pdf

We use our collective experience and understanding of flood risk management to ensure our objectives align with local and national expectations.

Our teams experience also allows us to understand the potential psychological, financial and mental health impacts of flooding on our residents.

We work closely with all our partners, our elected Members and communities. Committee meetings, dropin sessions, Liaison meetings, community groups and site visits all help compliment our work.

We listen to the concerns, needs and expectations of others, an understanding of what others want and need helps provide a strong platform for decision making.

I was not able to grieve for those lost memories - i was in shock.

My house was uninhabitable, I had to find emergency accomodation the duration of which was then unending as the Covid-19 pandemic took hold and all work to make good the damage was halted before it even began.

I cannot begin to fully describe the stress, upset and trauma I endured during those months.

I was finally able to return to live at my home on Friday 21 August 2020. 255 days after the flood.

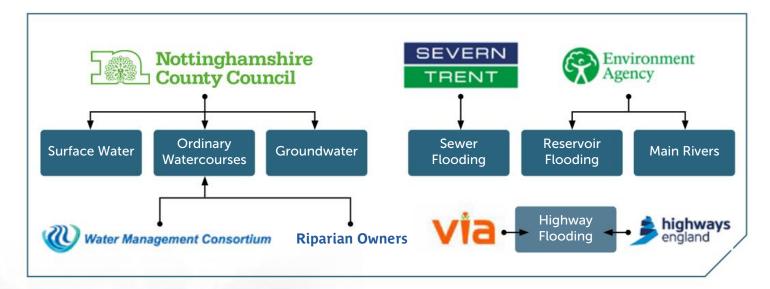
With no remaining furniture, only a garden chair to sit on, no table to eat at, no television or modern comforts. No curtains to keep out the night."

#### Who we work with

#### our 'Partners'

Local flooding isn't the only type of flooding faced by Nottinghamshire communities. Flooding from major rivers, the public sewerage system, watercourses and public highways has caused devastating outcomes across the County.

We work closely with our partners: Severn Trent Water, VIA East Midlands, the Environment Agency, Trent Valley Internal Drainage Board, Nottingham City Council, District and Borough Councils, Riparian owners and communities who each have their own role to play in managing flood risk.



We understand that the type of flooding doesn't really matter when you're in need of our help. We pride ourselves on our working relationships with all organisations involved in managing flood risk and will always work together when flooding happens.

We hold regular liaison meetings with our partners to ensure we retain a cohesive approach to flood risk and an understanding of each partner's priorities. Bi-annual Strategic Flood Risk Management Board meetings bring Elected Members and Officers from all partners together to review and discuss the management of flood risk across the County.

Formal updates on our progress are presented to the relevant County Council Committees and we routinely liaise with other departmental colleagues.

Our ambition is to contribute to making Nottinghamshire a great place to live and work. We want to enhance our built environment and ensure Nottinghamshire is safe and sustainable in terms of flood risk. We have witnessed how flooding devastates communities and understand the longterm impacts that can have on quality of life. We will keep our communities informed and educated about flood risk, to help embrace resilience, and to understand what is being done to manage flood risk across the County.

#### Making a difference

## How and when we will meet our objectives.

Having set out what we'd like to do, we want to evidence how our work is helping us achieve this.

Over the following pages we set out objectives in a little more detail, linking their supporting measures.

We endeavour to reduce all risks of flooding however our priority is to help anyone who has suffered internal flooding to their property. If you would like to discuss how flooding has affected you, please contact us using the information found at the end of this document.



Our strategic approach to managing flood risk focusses on five objectives:

- To pursue new solutions, partnerships and alleviation schemes to manage future flood risks and adapt to climate change in Nottinghamshire to ensure it is a great place to live, work, visit and relax.
- To improve delivery of flood risk management by working in partnership across functions and organisations, taking a catchment-based approach.
- To increase levels of awareness within local organisations and communities by enabling and supporting them so they can become more resilient to flooding and understand their land drainage responsibilities.
- To integrate local flood risk management into the planning process and support sustainable growth.
- To consider the environmental impact of proposed flood risk management measures, maximise opportunities to contribute to the sustainable management of our environment and deliver wider benefits.

£164m external investment on flood risk secured since 2012.

Objective 1: To pursue new solutions, partnerships and alleviation schemes to manage future flood risks and adapt to climate change in Nottinghamshire to ensure it is a great place to live, work and relax.

Legislation gives Nottinghamshire County Council a duty to investigate floods. In Nottinghamshire not only do we investigate what happened in a local flood we also look at ways we may be able to mitigate future risks and their consequences. We work with our partners to effectively utilize the breadth of experience and expertise available to us and seek funding opportunities to help us deliver mitigation schemes.

Any capital schemes we pursue are designed to allow for climate change and ensure they deliver the required standard of protection into the future. We embrace the opportunity to use Natural Flood Management techniques where possible and continually seek innovative ways of delivering our projects.

Flood

Case Study: Southwell

On the 23rd July 2013 the community of Southwell suffered the devastation of a major flood event with over 240 properties and businesses suffering internal flooding.

Following the event in 2013 Nottinghamshire County Council began looking at ways to reduce the future risk of flooding undertaking a catchment wide study to understand exactly what had happened. Alongside the surveying of flood risk assets, a significant focus of the study was capturing first-hand experience and observations from those local residents affected an approach that was to be invaluable in our understanding of the event.

Our approach led us to secure £4.368m for catchment wide improvements with contributions being secured from Flood Defence Grant in Aid, Local Levy, DEFRA, Nottinghamshire County Council Capital, Newark and Sherwood District Council and Southwell Town Council.

The scheme represents our largest single investment in Flood Risk to date in the County and our success would not have been possible without the inputs from all our partners.

The scheme protects over 250 properties and businesses against future flooding events. Measures including improved surface water flow path management and storage, property flood resilience and natural flood management combined with a wider understanding and acceptance of maintenance roles and responsibilities will reduce the likelihood and consequences of future flooding events and increase the level of protection against flooding in the catchment.

Objective 2: To increase levels of awareness within local organisations and communities by enabling and supporting them so they can become more resilient to flooding and understand their land drainage responsibilities.

We all have a part to play in managing flood risk, and often local organisations and communities can make a significant difference.

Our approach is underpinned by the motto 'Prepare Not Repair' one that captures a proactive message and seeks to empower others.

We work with Parish Councils and local flood action groups across the County to help them understand flood risk and improve local resilience. Having a localised awareness can be crucial in managing flood risk particularly during times of high risk, local knowledge spans both the topography of the catchment as well as the demographic which has proven invaluable.

We also ensure our online information is kept up to date and presented in a manner that encourages interaction, we use a FAQ's section to help with the more common issues and provide links to more details where necessary. We keep a register of critical flood risk assets and monitor changes to ordinary watercourses through our Consenting process. Our flooding pages can be found here using the link at the bottom of the page.

#### Case Study: Bleasby

Bleasby is a small rural community that sits between the River Trent to the east and steeply sloping agricultural land to the west. The community is at risk both from surface water (pluvial) and river (fluvial) flooding.

Our work with the community began in 2018 when we started to attend and support their established Flood Action Group. This groups aim was to develop a proactive approach to local flood risk and our role was to further support and expand their understanding.

To date we have resolved a number of localised issues in the catchment and our foresight has resulted in securing external funding that has allowed us to commission a detailed hydraulic study of the western element of the catchment. It is hoped this study will help us identify further ways of reducing the risk of flooding in the catchment.

Once completed we plan to use the outputs of the study as a centerpiece for a community led Flood Awareness drop-in session and support the ongoing work with the flood action group.



Objective 3: To improve delivery of flood risk management by working in partnership across functions and organisations, taking a catchment-based approach.

Flooding is usually a result of several contributing factors, themselves usually the responsibility of several organisations. Rather than split flooding down into its separate parts we endeavor to adopt a catchment-based approach to our investigations.

We believe this approach allows a truly effective understanding of the issues and allows us to work with our partners on recovery and mitigation.

This approach also allows us to draw on the significant experience and expertise from within our partner organisations and communities whilst ensuring expectations of those involved are kept clear and realistic.



www.nottinghamshire.gov.uk/planning-and-environment/flooding-help-and-advice 0300 500 8080 - flood.team@nottscc.gov.uk

#### Case Study: Upper Daybrook Catchment

The Upper Day Brook catchment serves the heavily urbanised Arnold and Daybrook areas of Nottinghamshire. There is a significant history of flooding in the catchment from a number of sources including surface water, public sewer network, watercourses (both ordinary and main river designated) and highway drainage.

A complex network of surface water assets interacts with each other to manage the flow of water through the catchment.

In 2018 we secured £99k of external funding to carry out a detailed and comprehensive study of these assets. The aim of the study was to clarify ownership, responsibility and condition of the surface water assets as well as create a prioritized list of areas to be considered for future capital investment.

The team involved in delivery consisted of:

- Nottinghamshire County Council Flood Risk Management Team
- Gedling Borough Council
- Severn Trent Water
- WSP Consultants
- Environment Agency

We used WSP, one of Severn Trent Water's consultants, to carry out the detailed hydraulic modelling, carry out site surveys and compile the report. We also managed to align our study with other programmed works within the catchment, allowing us to widen the scope of our investigations and not incur additional costs.

Our report was completed and met all of our partners expectations. The report provides us all with a significantly improved understanding of the catchment and our pursuit of improvements to the management of surface water will continue over the coming years.

Objective 4: To integrate local flood risk management into the planning process and support sustainable growth.

As Lead Local Flood Authority (LLFA) we are a statutory consultee in the planning process. This means that each of the Local Planning Authorities (LPAs) consults with us on the proposed management of surface water for major planning applications. We provide our comments for the LPAs consideration in their decision making process.

We encourage and promote the use of sustainable drainage systems (SuDS) in all new developments and provide bespoke responses to all major application consultations. Our comments have helped protect tens of thousands of new properties and support sustainable growth across the County.

We engage with our LPAs to ensure as far as possible that they take full account of flood risk in Local Plan policies and allocations and supplementary planning documents. Case Study: Queen Elizabeth Crescent -Rhodesia

Our involvement helped shape the sustainable drainage for the development which, as well as incorporating a large, open surface water attenuation feature, also linked into an adjacent local wildlife site. Nottinghamshire Wildlife Trust acknowledged that additional surface water from the development may benefit their site.

The sitewide surface water drainage design allows for 40% uplift due to climate change as well as an allowance for urban creep to cope with smaller localized changes in surfaces such as driveways and gardens.



Average 850 bespoke consultation responses per year.

Objective 5: To consider the environmental impact of proposed flood risk management measures, maximise opportunities to contribute to the sustainable management of our environment and deliver wider benefits.

As our role and its impact on the wider environment continues to develop, we seek opportunities to promote sustainability and capture as many benefits as possible from our work.

The built environment is changing, and our challenge is to ensure we align our strategic direction with those changes whilst supporting the wider goals of the Authority.

Our working relationships with our partners afford us enviable opportunities to pursue innovative and sustainable ways of managing our environment.

#### Case Study: Mansfield Green Recovery

As part of the Government's Green Recovery plans a large scale roll out of a nature-based approach to reducing flood risk is being planned in Nottinghamshire. The proposals, being led by Severn Trent Water with Nottinghamshire County Council as a key partner, are looking to install natural flood management measures such as green embankments, ponds and grassed areas that will help reduce the broader harm that flooding brings to local communities. This will be the first catchment scale flood resilient project of its type and is being planned for the Mansfield area.

What?	<ul> <li>Creating the first catchment-scale resilient community by rolling out a range of nature based solutions to reduce the risk of flooding.</li> <li>Installing sufficient blue-green interventions to store the equivalent of 58000m³ of surface water.</li> </ul>
How?	<ul> <li>Work in partnership with Lead local Flood         Authority and local councils to install and         maintain a mixture of blue-green soft         infrastructure.</li> <li>Target areas to prioritise financially vulnerable         areas of the demographic.</li> </ul>
Benefits	<ul> <li>Significant reduction in risk of flooding to the catchment.</li> <li>Creating additional biodiversity of Combined Storm Overflows.</li> <li>Improving local amenties.</li> <li>Job creation.</li> </ul>

The project is programmed to deliver £85M worth of flood risk improvements by 2025.

# **WORKING WITH COMMUNITIES** to raise awareness and resilience – how you can help.

Localised awareness and understanding of flood risk and basic responsibilities can help ensure issues are dealt with effectively and often without them creating serious problems.

VILLAGE RESILIENCE **BRINGING POWER TO THE PEOPLE!** PREPARE REPAIR

We can support you and your Community with knowledge sharing, either through our webpage or working with you direct. A number of our communities already benefit from our support through localised Flood Action Groups, usually formed as part of Parish or Town Council arrangements.



These events are not only a great way to meet our residents, but also enable us to work together to raise awareness and resilience whilst directly protecting properties from flooding.

We want this strategy to be a simple living document, allowing you to find detailed information via existing links and make further contact where you have interest to do so.

Talking with us and sharing concerns and ideas is always appreciated.

For further information please use the information below.

Over 2000 critical assets recorded and mapped.

www.notting hamshire.gov.uk/planning-and-environment/flooding-help-and-advice



We have come a long way since we became responsible for local flooding in 2010 and continue to develop each year, working with more residents, communities and partners to protect property and make positive changes. Should you wish to contact us, please use the details below.

flood.team@nottscc.gov.uk www.nottinghamshire.gov.uk/planning-and-environment/flooding-help-and-advice 0300 500 8080 Nottinghamshire County Council Flood Risk Management Team County Hall Loughborough Road West Bridgford Nottingham NG2 7QP

September 2021 – All figures quoted are correct at date of publishing

This document is issued by the: Flood Risk Management Team, Nottinghamshire County Council and can be translated, and/or made available in alternative formats, on request.



